# BBB and RPi2
# Allstar Environment Variables

Starting at BBB version 1.2.1 an environment file similar to the way it is done in IRLP was added on the BBB. This will make it easier now and especially into the future to configure the system parameters of your Allstar server in a safe manner and all in one place. No more commenting/uncommenting or otherwise changing files to change parameters.

Formerly this configuration was done in /etc/rc.local as well as other locations. The environment file is located in /usr/local/etc/allstar.env

In this file are options which can be enable or disabled. In addition your primary node number is stored. The data is stored in variables that are exported for use by other applications running in the system. Note that the example below show node 1998 which is the NODE1 default value. Once you have setup your server this will reflect your primary node number.

The environment file looks like this:

```
#!/bin/bash
#
# asterisk.env

# This is the allstar environment file which defines global variables used by
# allstar for your server. This file is used on both the BBB and the RPi2
# but note that some variables may only apply to one board

# defines the primary node (node1) number
export NODE1=1998

# defines the start delay prior to staring asterisk
# This value is typically set to 30 for the BBB and 0 for the RPi2
export START_DELAY=30

# defines the firewall status (enabled or disabled)
#  default="disabled"

export FIREWALL="disabled"

# defines the virtual private network status (enabled or disabled)
# default="disabled"

export VPN_NETWORK="disabled"

# defines the watchdog timer (enabled or disabled)
# default="disabled"
```

export WATCHDOG="disabled"

# defines saying of local IP address at boot (enabled or disabled)
# default="enabled"

export SAY_IP_AT_BOOT="enabled"

# defines hardware type, either "BBB" for beaglebone black, or "RPi2"
# for Raspberry Pi2
export HWTYPE=RPi2

# defines the optional halt switch to the RPi2 (enabled or disabled)
# default="disabled"
export SHUTDOWN_MONITOR="disabled"

As you can see the options have default or shipped values which can be changed by the user. Some value changes will take effect immediately and others would require a reboot. Future versions will more than likely expand on this list.

Any user specific functions or programs that you wish to add to the system that must be run automatically at boot and do not have a systemd run script should be added to the /etc/rc.local  script after the call to rc.allstar and before it exits.


## Sourcing and using the Environment Variables

You may use any of these variables in personal scripts but the most useful one would be the $NODE1 variable which defines your node number. While these variables are sourced (made available) to the root user at logon it is always good practice to source them in your script prior to using them. Here is a snippet on how to do that:

```
# source the allstar variables
if [ -f /usr/local/etc/allstar.env ] ; then
   . /usr/local/etc/allstar.env
else
   echo " Unable to read /usr/local/etc/allstar.env file."
   exit 1
fi
```

The important line is:

```
 . /usr/local/etc/allstar.env
```

which sources or reads the environment file.

Here is example of using an environment variable at the command line.

Lets say your node is 1998 and you wanted to say the time. You could type:

**saytime.pl 1998**

OR

**saytime.pl $NODE1**

with the same results.